

1. (Twice amended) A mutant antibody comprising a reactive site not present in the wild-type of said antibody and six complementarity determining regions (CDRs) that recognize a metal chelate or portions thereof, wherein said reactive site is in a position proximate to or within said complementarity-determining regions,

wherein said reactive site is the mutation and,

wherein said reactive site interacts with a reactive group selected from carboxyl groups, hydroxyl groups, haloalkyl groups, dienophile groups, aldehyde groups, ketone groups, sulfonyl halide groups, thiol groups, amine groups, sulfhydryl groups, alkene groups, and epoxide groups.

14. (Twice amended) The mutant antibody according to claim 1, wherein said mutant antibody is a mutant of the antibody deposited as ATCC Deposit No. PTA-4696.

22. (Once amended) The mutant antibody according to claim 20, wherein said reactive group of said chelate is an acrylamido moiety.

25. (Twice amended) A mutant antibody comprising a cysteine residue not present in the wild-type of said antibody and six complementarity determining regions (CDRs) that recognize a metal chelate or portions thereof, wherein said cysteine is in a position proximate to or within said complementarity-determining regions, wherein said cysteine residue is the mutation.

42. (Once amended) A mutant antibody comprising a reactive site not present in the wild-type of said antibody and six complementarity determining regions (CDRs) that specifically bind a metal chelate, wherein said reactive site is in a position proximate to or within said complementarity-determining regions,

wherein said reactive site is the mutation and,

wherein said reactive site interacts with a reactive group selected from carboxyl groups, hydroxyl groups, haloalkyl groups, dienophile groups, aldehyde groups,

ketone groups, sulfonyl halide groups, thiol groups, amine groups, sulfhydryl groups, alkene groups, and epoxide groups.

43. (Once amended) A mutant antibody comprising a reactive site not present in the wild-type of said antibody and six complementarity determining regions (CDRs) that recognize a metal chelate comprising a reactive group or portions thereof, wherein said reactive site is in a position proximate to or within said complementarity-determining region regions,

wherein said reactive group has complementary reactivity to said reactive site of said antibody,

wherein said reactive site is the mutation, and

wherein said reactive group is selected from carboxyl groups, hydroxyl groups, haloalkyl groups, dienophile groups, aldehyde groups, ketone groups, sulfonyl halide groups, thiol groups, amine groups, sulfhydryl groups, alkene groups, and epoxide groups.

Please add new claim 44.

44. (New) The mutant antibody according to claim 1, wherein said mutant antibody is a mutant of CHA255.

REMARKS

The Invention

The present invention is directed to a mutant antibody comprising a reactive site not present in the wild-type of said antibody and complementarity-determining regions (CDRs) that recognize a metal chelate. The reactive site is in a position proximate to or within said complementarity-determining regions. The reactive site is the mutation and interacts with a reactive group selected from carboxyl groups, hydroxyl groups, haloalkyl groups, dienophile groups, aldehyde groups, ketone groups,